

## CLAIMS

1 A disc brake rotor having a grey cast iron composition, characterised in that said composition comprises between 0.5 and 1.2% by weight of copper, and a plurality of hard carbide forming metals including both vanadium and titanium, the ratio between the weight of copper present and the total weight of said hard carbide forming metals being 1.8 to 3 units of copper to 1 unit of the hard carbide forming metals.

2 A disc brake rotor according to claim 1, characterised in that the hard carbide forming metals also include one or more of tungsten, molybdenum, chromium, and niobium.

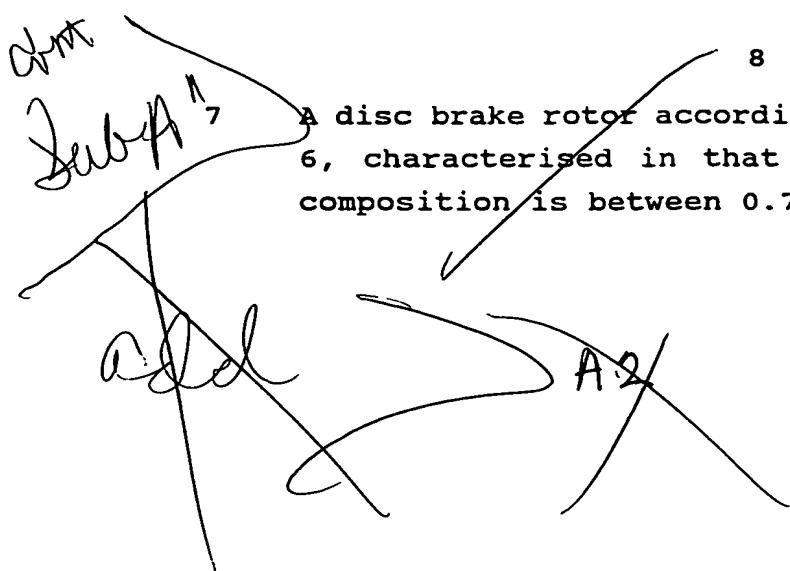
3 A disc brake rotor according to either one of claims 1 and 2, characterised in that the weight of vanadium present in the composition is less than or equal to one half of the weight of copper present added to 20 times the weight of titanium present.

4 A disc brake rotor according to any one of claims 1 to 3, characterised in that the carbon equivalent of the composition is between 4.2 and 4.55.

5 A disc brake rotor according to any one of claims 1 to 4, characterised in that the titanium content of the composition is between 0.025 and 0.035 wt%.

6 A disc brake rotor according to any one of claims 1 to 5, characterised in that the vanadium content of the composition is between 0.35 and 0.45 wt%.

AMENDED SHEET



A disc brake rotor according to any one of claims 1 to 6, characterised in that the copper content of the composition is between 0.7 and 0.9 wt%.